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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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oplication of:

Couto et al.

Serial No.:

10/635,117

Group No.:

1644

Filed:

08/06/03

Examiner:

Mondesi, R.

For:

METHODS OF TANGENTIAL FLOW FILTRATION AND AN

APPARATUS THEREFORE

Attorney Docket Number: GTC-207

Mail Stop Amendment Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

TRANSMITTAL OF INFORMATION DISCLOSURE STATEMENT AFTER THE FIRST OFFICE ACTION ON THE MERITS BUT BEFORE MAILING OF EITHER A FINAL ACTION OR A NOTICE OF ALLOWANCE (37 CFR 1.97(c))

Dear Sir.

1. Authority

Pursuant to 37 CFR § § 1.56 and 1.97-1.99, the Applicant cites to the Examiner documents containing information which, in good-faith judgment of the Applicant, may be relevant to the subject mater claimed in the above-identified application. The Applicant also encloses copies of the Englishlanguage cited documents.

In submitting this Information Disclosure Statement, the Applicant makes no representation that a search has been performed, or the extent of any search performed, or that more relevant information does not exist.

In submitting this Information Disclosure Statement, the Applicant makes no representation that any document cited in this Information Disclosure Statement is, or is considered to be prior art as defined by 35 USC § \$ 102 and 103.

2. Time of transmittal of accompanying Information Disclosure Statement

The Information Disclosure Statement transmitted herewith is being filed *after* three months of the filing date of this application *and after* the mailing date of the first Office action on the merits, but *before* the mailing date of either:

09/20/2004 KBETEMAI 00000028 502092 10635117

(1) a final action under § 1.113, or

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(2) a notice of allowance under § 1.311, whichever occurs first.

CERTIFICATE OF MAILING BY EXPRESS MAIL

I hereby certify that under 37 CFR §1.10 that this correspondence is being deposited on 5e pt mber 11, 2004 with the United States Postal Service as Express Mail Post Office to Addressee with sufficient postage in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Kristin Kaberry

Applicant elects to pay the fee set forth in 37 CFR 1.17(p) for submission of an Information Disclosure Statement under § 1.97(c). Please charge the fee of \$180.00 to Deposit Account No. 502092.

3. Foreign Search Reports

A copy of the PCT International Search Report from a counterpart application is enclosed. Legible copies of all items listed in Form PTO-1449 accompany this information statement. Cumulative patents or publications identified in the attached PCT Search Report are not enclosed.

I hereby certify that each item of information contained in the information disclosure statement was first cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. 37 CFR 1.97 (e) (1).

The Applicant respectfully requests that:

- a. The Examiner consider the cited information in reaching a determination concerning the patentability of the pending claims; and
- b. The enclosed Form PTO-1449 be signed by the Examiner to evidence that the cited information has been fully considered by the Patent and Trademark Office during the examination of this application.

The person making this statement is the attorney who signs below on the basis of the information in the attorney's file.

By:

ated: (7) (7)

Byron V. Olsen, Reg. No. 42,960

Attorney for Applicants
GTC Biotherapeutics, Inc.
175 Crossing Blvd., Suite 410

Framingham, MA 01702

Tel. #(508) 370-5150 Fax #(508) 370-3797

PTO/SB/08A (08-03)

Approved for use through 07/31/2006. OMB 0651-0031

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Complete if Known

Substitute for form 1449/PTO SEP 1 7 2004

Sheet 1

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

of 3

Complete il Known				
Application Number	10/635,117			
Filing Date	08/06/2003			
First Named Inventor	Daniel E. Couto			
Art Unit	1653			
Examiner Name	Mondesi, Robert B			
Attorney Docket Number	GTC-207			

			U. S. PATEN	DOCUMENTS	
Examiner Initials*	Cite No. ¹	Document Number Number-Kind Code ^{2 (# known)}	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		^{US-} 4,874,516	10-17-1989	NGK Insulators, Ltd	
		^{US-} 4,888,115	12-19-1989	Cuno, Incorporated	
		^{US-} 5,256,294	10-26-1993	Genentech, Inc.	
		^{US-} 5,490,937	02-13-1996	Genentech, Inc.	
		^{US-} 5,585,466	12-17-1996	United States of Ame	
		^{US-} 5,948,441	09-07-1999	The Liposome Company	
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FOREIGN PATENT DOCUMENTS						
Examiner Cite			Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages	
		Country Code ³ *Number ⁴ *Kind Code ⁵ (if known)	MM-DD-YYYY		Or Relevant Figures Appear	L
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Signature	Consid	ered	
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This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patenta, P.O. Box 1450, Alexandria, VA 22313-1450.

Substitute for form 1449/PTO				Complete if Known		
				Application Number	10/635,117	
INF	ORMATION	I DIS	SCLOSURE	Filing Date	08/06/2003	
STA	ATEMENT I	BY A	PPLICANT	First Named Inventor	Daniel E. Couto	
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(Use as many sheets as necessary)				Examiner Name	Mondesi, Robert	
Sheet	2	of	3	Attorney Docket Number	GTC-207	

·		NON PATENT LITERATURE DOCUMENTS	
Examiner Cite Incl Initials* No.1 the		Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		Andersson, "The Heterogeneity of Bovine Serum Albumin," BIOCHIM. BIOPHYS. ACTA. 117:115-133 (1966)	
		Alun, J. et al., Activity Of Microbial Peptidases, Oxidases, And Esterases In Lake Waters Of Varying Trophic Status, CAN J MICROBIOL 39(8):795-803 (1993)	
		Aranha-Creado et al., Cumulative Viral Titer Reduction Demonstrated By Sequential Challenge Of A Tangential Flow Membrane Filtration System And A Direct Flow Pleated Filter Cartridge, PDA J PHARM SCI TECHNOL 51 (5): 208–212 (1997)	
		Aravindan GR, et al., Identification, Isolation, And Characterization Of A 41-Kilodalton Protein From Rat Germ Cell-Conditioned Medium Exhibiting Concentration-Dependent Dual Biological Activities, ENDOCRINOLOGY, 138(8): 3259-68 (1997)	
		Federspiel G, et al., Hybridoma Antibody Production In Vitro In Type II Serum-Free Medium Using Nutridoma-SP Supplements: Comparisons With In Vivo Methods, J IMMUNOL METHODS 145(102): 213-221 (1991)	
		Gabler et al., Principles of Tangential Flow Filtration: Applications to Biological Processing, in FILTRATION IN THE PHARMACEUTICAL INDUSTRY, pp. 453-490 (1987)	
		Kahn DW, et al., Purification Of Plasmid DNA By Tangential Flow Filtration, BIOTECHNOL BIOENG. 69(1):101-106 (2000)	
		Kawahara H, et al., High-Density Culture Of FM-3A Cells Using A Bioreactor With An External Tangential-Flow Filtration Device, CYTOTECHNOLOGY 14(1):61-66 (1994)	
		Porter, ed., HANDBOOK OF INDUSTRIAL MEMBRANE TECHNOLOGY, (Noyes Publications, Park Ridge, New Jersey,/1990) pp. 160-176	
		Prado SM, et al., Development And Validation Study For The Chromatographic Purification Process For Tetanus Anatoxin On Sephacryl S-200 High Resolution, BOLL CHIM FARM, 138(7): 364–368 (1999)	

Examiner		Date	
Signature		Considered	

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¹ Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.

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PTO/SB/08B (08-03)
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,	Application Number	10/635,117	
INFORMATION DISCLOSURE	Filing Date	08/06/2003	
STATEMENT BY APPLICANT	First Named Inventor	Daniel E. Couto	
(Use as many sheets as necessary)	Art Unit	1653	
(Oso as many shoets as necessary)	Examiner Name	Mondesi, Robert	
Sheet 3 of 3	Attorney Docket Number	GTC-207	

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		NON PATENT LITERATURE DOC			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title the item (book, magazine, journal, serial, symposium, canumber(s), publisher, city and/or cour	talog, etc.), date,	page(s), volume-issue	T²
		Ronco et al., On-Line Filtration Of Dialysate: Structural Asymmetric Polysulfone Hollow Fiber Ultrafilter, INT J			
_		Strauss PR, Use Of Filtron Mini-Ultrasettetm Tangential Flow Dev Concentrators In The Early Stages Of Purification Of DNA Polyme 158–160 (1995)	ice And Filtron Micro erases, , BIOTEC	oseptm Centrifugal CHNIQUES 18(1):	
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Examiner	Date	
Signature	Considered	

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